

## ABSTRACT OF THE DISCLOSURE

A process for isomerizing ethylbenzene into paraxylene using a zeolitic catalyst system based on MTW-type zeolite that is substantially free of mordenite. The invention obtains an improved yield of paraxylene without excess benzene production by  
5 dealkylation. The zeolitic silica-to-alumina ratio ranges from 20 to 45. Elimination of mordenite in the catalyst improves yields and integrated aromatics complex economics by reducing undesirable aromatic ring-loss reactions as well.